#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025149 Address: 333 Burma Road **Date Inspected:** 26-Nov-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Tian Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

#### Bay Number 1

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB16A-003 weld number(s) 001~012. Welder is identified as welder no. 067550. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2133-B-U2.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB16A-002 weld number(s) 126~131. Welder is identified as welder no. 068554. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2132-B-U2.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1D-022 weld number(s) 030~043. Welder is identified as welder no. 068916. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2133-B-U2.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1D-038 weld number(s) 063~074. Welder is identified as welder no. 068493. The welding variables recorded by ZPMC QC identified as

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2133-B-U2.

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a UT report for this date. All components were as listed on NWIT notification no. 07508. The member(s) is/are identified as OBG Barrier Rails. The weld designations reviewed are as follows:

- 1. E2-SB5-024-081.
- 2. E2-SB5-025-081.
- 3. E2-SB5-022-019.
- 4. E2-SB5-021-050.
- 5. E2-SB1-024-081.
- 6. E2-SB1-023-019.
- 7. E2-SB2-005-050.
- 8. E2SB1D-042-081.
- 9. E2-SB1C-011-050.
- 10. E2-SB4-003-019.

# Bay Number 2

Performed verification VT for the component(s) identified as OBG Sub Assembly for components listed as SA3336A-001, SA3336B-001, SA3336B-002, SA3336C-001, SA3336C-002, & SA3336C-003. This QA inspector signed green tag #15374.

Performed verification VT for the component(s) identified as OBG Sub Assembly for components listed as SA3337B-001, SA3337B-002, SA3337C-002, SA3337C-001, SA3337C-003, SA3337C-004 & SA3337C-005. This QA inspector signed green tag #15375.

Performed verification VT for the component(s) identified as OBG Sub Assembly for components listed as SA3341A-001, SA3341B-001, SA3341C-001, & SA3341D-001. This QA inspector signed green tag #15376.

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a UT report for this date. All components were as listed on NWIT notification no. 07505. The member(s) is/are identified as OBG Longitudinal Diaphragms. The weld designations reviewed are as follows:

- 1. LD3048-001-043 & 047.
- 2. LD3049-001-034, 036, 145, 157, 169, 170, 158, 146, 173, 161, & 174.

FCAW welding of vertical CJP welds located on Segment component identified as SEG5712 as identified on weld repair data sheet B-WR-17788. Welder is identified as welder no. 066236. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-3G(3F)-repair-1.

Bay Number 3

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Performed verification VT for the component(s) identified as OBG Floor Beam for component listed as FB3329-001. This QA inspector signed green tag #15238.

FCAW welding of vertical CJP welds located on Longitudinal Diaphragm component identified as LD3041-001 as identified on weld repair data sheet BWR-16804. Welder is identified as welder no. 069896. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G(1F)-repair-1.

Bay Number 4

This inspector did not observe any welding or contract work in this bay today.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents



# **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer